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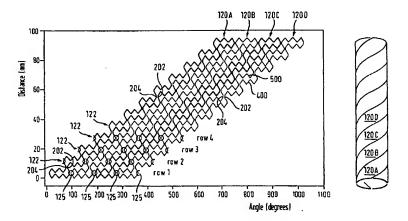
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[Continued on next page]

(54) Title: MRI COMPATIBLE IMPLANT COMPRISING ELECTRICALLY CONDUCTIVE CLOSED LOOPS



(57) Abstract: The present invention relates to an implant 100 which comprises a plurality of electrically-conductive closed loops (300A, 300B, 300C, 300D; 120A, 120B, 120C, 120D each constituted from a plurality of loop portions such as struts (400, 500). The loops together form apertured walls of a cage with an interior volume, and the portions in any one said loop providing electricallyconductive pathways within which eddy currents are liable to be induced when the implant is subjected to an time-dependent external magnetic field, with each said loop comprising at least first and second said pathways. The implant is characterized in that the first and second pathways are arranged such that, in any particular magnetic field, the direction of the eddy current that would be induced in the second pathway is the reverse of the direction of the eddy current that would be induced in the first pathway, so as to mitigate the tendency of the implant to function in said magnetic field as a Paraday cage.

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